

**LAND APPLICATION SITE**

**FRED M MOREAU**

**DWFMM 1-5**

**DINWIDDIE COUNTY**

# VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION

## FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

### PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on NOV 19 2014 between FERNAND M. & JANE C. MOREAU referred to here as "Landowner", and Recyc Systems, Inc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

#### Landowner:

The Landowner is the owner of record of the real property located in Dinwiddie, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
38 19B			
38 19C			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.  
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

FERNAND M. MOREAU

JANE C. MOREAU

Landowner - Printed Name, Title

Fernand M. Moreau  
Jane C. Moreau

Signature

2401 GRUBBY RD  
BLACKSTONE, VA 23824  
434.294.5942

Mailing Address & Phone Number

#### Permittee:

Recyc Systems, Inc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

[Signature]  
 Permittee - Authorized Representative  
 Printed Name

Signature

PO Box 562 Remington, Virginia 22734  
 Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: DINWIDDIE CO.

Landowner: FERNAND & JANE MOREAU

**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Fernand Moreau  
Jane B Moreau  
Landowner's Signature

NOV, 19, 2014  
Date

Fernand Moreau  
Farm Operator Signature

434-294-5942  
2401 GRUBBY RD, BLACKSTONE VA, 23824  
Mailing Address & Phone Number

# FARM DATA SHEET

<b>SITE NAME:</b>	Fred M Moreau	<b>COUNTY:</b>	Dinwiddie
<b>OWNER:</b>	Fred & Jane Moreau	<b>OPERATOR:</b>	Fred M Moreau
<b>OWNER'S ADDRESS:</b>	2401 Grubby Road Blackstone, VA 23824	<b>OPERATOR'S ADDRESS:</b>	2401 Grubby Road Blackstone, VA 23824
<b>OWNER'S TELEPHONE:</b>	Fred: 434-294-5942 Jane: 434-294-5620	<b>OPERATOR'S TELEPHONE:</b>	434-294-5942
<b>GENERAL FARM TYPE:</b>	Crop	<b>CELL PHONE:</b>	-
<b># CATTLE:</b>	None	<b>EMAIL:</b>	-
<b>LAGOON or SLURRY:</b>	None	<b>LATITUDE:</b>	37.111
<b>TOPO QUAD:</b>	Darvills	<b>LONGITUDE:</b>	- 77.859
<b>COMMENTS:</b>	<b>METHOD OF DETERMINATION:</b> Online Maps		

AB/BB

7-27-20

**NEW FIELD CHANGES**

**FRED M. MOREAU**

**DINWIDDIE COUNTY**

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**NEW FIELD 1 IS OLD FIELDS 1 AND 2.**

**NEW FIELD 2 IS A NEW FIELD.**

**NEW FIELD 3 IS OLD FIELD 3.**

**NEW FIELD 4 IS OLD FIELD 4.**

**NEW FIELD 5 IS OLD FIELD 5.**

## Landowner Coordination Form

Permittee: Recyc Systems, Inc.

County or City: Dinwiddie County

Signature not required on this page

[illegible]

# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
DWFMM 1	21.7	-	-	-	-	CU 19	38-19B	T 585 F 3, 9, 11, 12
DWFMM 2N	2.3	-	-	-	-	CU 19	38-19B 38-19C	T 585 F 1
DWFMM 3	37.4	-	-	-	-	CU 19	38-19B	T 585 F 5
DWFMM 4	8.1	-	-	-	-	CU 19	38-19B	T 585 F 7, 10
DWFMM 5	7.9	-	-	-	-	CU 19	38-19B	T 585 F 4
TOTAL ACRES IN SITE	77.4							

3-2-21

THE PLANNER IS NOT STATE CERTIFIED

**Nutrient Management Plan Balance Sheet**  
**(Fall, 2020-Winter, 2022)**  
**Fred M. Moreau**  
**Planner: John Doe**

Tract: 585

Location: Dinwiddie

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
3, 9, 11, 12/DWFMM 1(N)	22/22	2020	Wheat (grain)	100-60-60	20/0				80-60-60	N/A			
		2021	*** **	--- --									
1/DWFMM 2(N)	2/2	2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A			
		2021	*** **	--- --									
5/DWFMM 3(N)	37/37	2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A			
		2021	*** **	--- --									
7, 10/DWFMM 4(N)	8/8	2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A			
		2021	*** **	--- --									
4/DWFMM 5(N)	8/8	2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A			
		2021	*** **	--- --									

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

**Soil Test Summary**

<b>Tract</b>	<b>Field</b>	<b>Acre</b>	<b>Date</b>	<b>P2O5</b>	<b>K2O</b>	<b>Lab</b>	<b>Soil pH</b>	<b>Lime Date</b>	<b>rec. lime tons/Ac</b>
585	DWFMM 1	22	[No Test]						
585	DWFMM 2	2	[No Test]						
585	DWFMM 3	37	[No Test]						
585	DWFMM 4	8	[No Test]						
585	DWFMM 5	8	[No Test]						

### **Field Productivities for Major Crops**

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
585	585/3, 9, 11	DWFMM 1	22	Appling	IVa	II	III	III	
	585/1	DWFMM 2	2	Appling	IVa	II	III	III	
	585/5	DWFMM 3	37	Appling	IVa	II	III	III	
	585/7, 10	DWFMM 4	8	Appling	IVb	III	III	III	
	585/4	DWFMM 5	8	Appling	IVa	II	III	III	

### **Yield Range**

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

## Farm Summary Report

**Plan:**            **New Plan**        **Fall, 2020 - Winter, 2022**

**Farm Name:**    **Fred M. Moreau**

Location:        Dinwiddie

Specialist:      John Doe

N-based Acres: 77.4

P-based Acres: 0.0

**Tract Name:**    **585**

FSA Number:    585

Location:                Dinwiddie

**Field Name:**        **DWFMM 1**

Total Acres:    21.70    Usable Acres:    21.70

FSA Number:    3, 9, 11, 12

Tract:            585

Location:                Dinwiddie

Slope Class:    B            Hydrologic Group:    B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

### *P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

### **Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

### **Soils:**

PERCENT	SYMBOL	SOIL SERIES
80	2B	Appling
12	2C	Appling
8	4B	Cecil

**Field Warnings:**

**Field Name:** DWFMM 2

Total Acres: 2.30 Usable Acres: 2.30

FSA Number: 1

Tract: 585

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
100	2B Appling	

**Field Warnings:**

**Field Name:** DWFMM 3

Total Acres: 37.40 Usable Acres: 37.40

FSA Number: 5

Tract: 585

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
88	2B	Appling
12	2C	Appling

**Field Warnings:**

**Field Name:** DWFMM 4

Total Acres: 8.10 Usable Acres: 8.10

FSA Number: 7, 10

Tract: 585

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
91	2B	Appling
9	W	Water

**Field Warnings:**

**Field Name:** DWFMM 5

Total Acres: 7.90 Usable Acres: 7.90

FSA Number: 4

Tract: 585

Location: Dinwiddie

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

**Soils:**

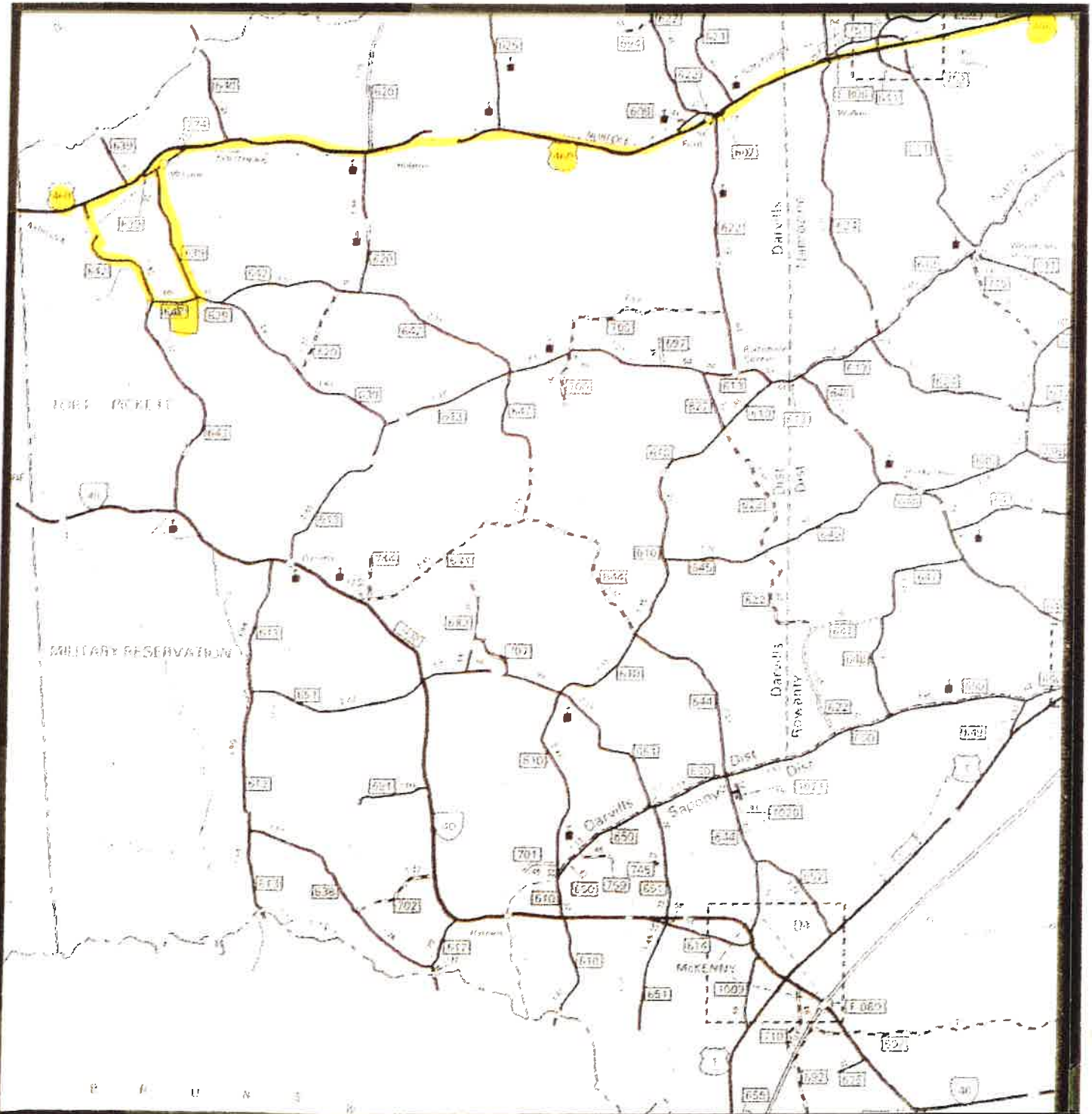
PERCENT	SYMBOL	SOIL SERIES
95	2B	Appling
5	2C	Appling

**Field Warnings:**

# MAPS

# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch=2miles

DWFMM 1-5

 Truck  
Route

**VICINITY MAP**

7-23-20



## (Biosolids Land Application)



DWFMM 1=5

7-23-20

## Truck Route

### VICINITY MAP





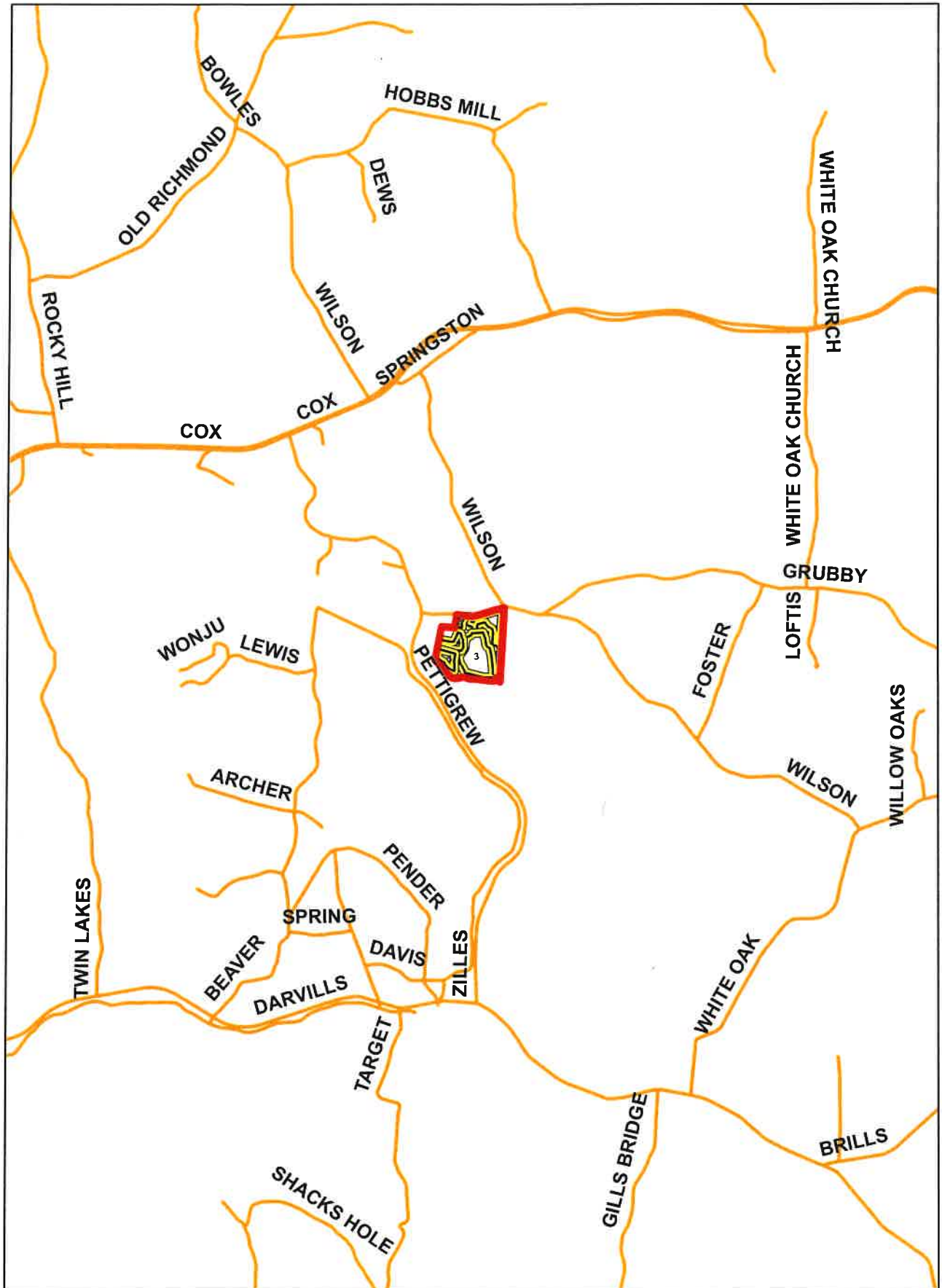
This map illustrates the road network and local geography around Wilson, Virginia. The central focus is the town of Wilson, marked with a red square and yellow center. Major roads radiate from this point, including Military, Friend, Willis, and Old Richmond. Other notable roads include Cedar Hill, Spainville, Rocky Hill, and White Oak Church. The map also shows numerous smaller communities and landmarks, such as Cedar Hill, Spainville, Rocky Hill, and White Oak Church. The Wilson area is centrally located, surrounded by various other communities and landmarks.



7-23-20

## Vicinity Map

1 in = 2 miles

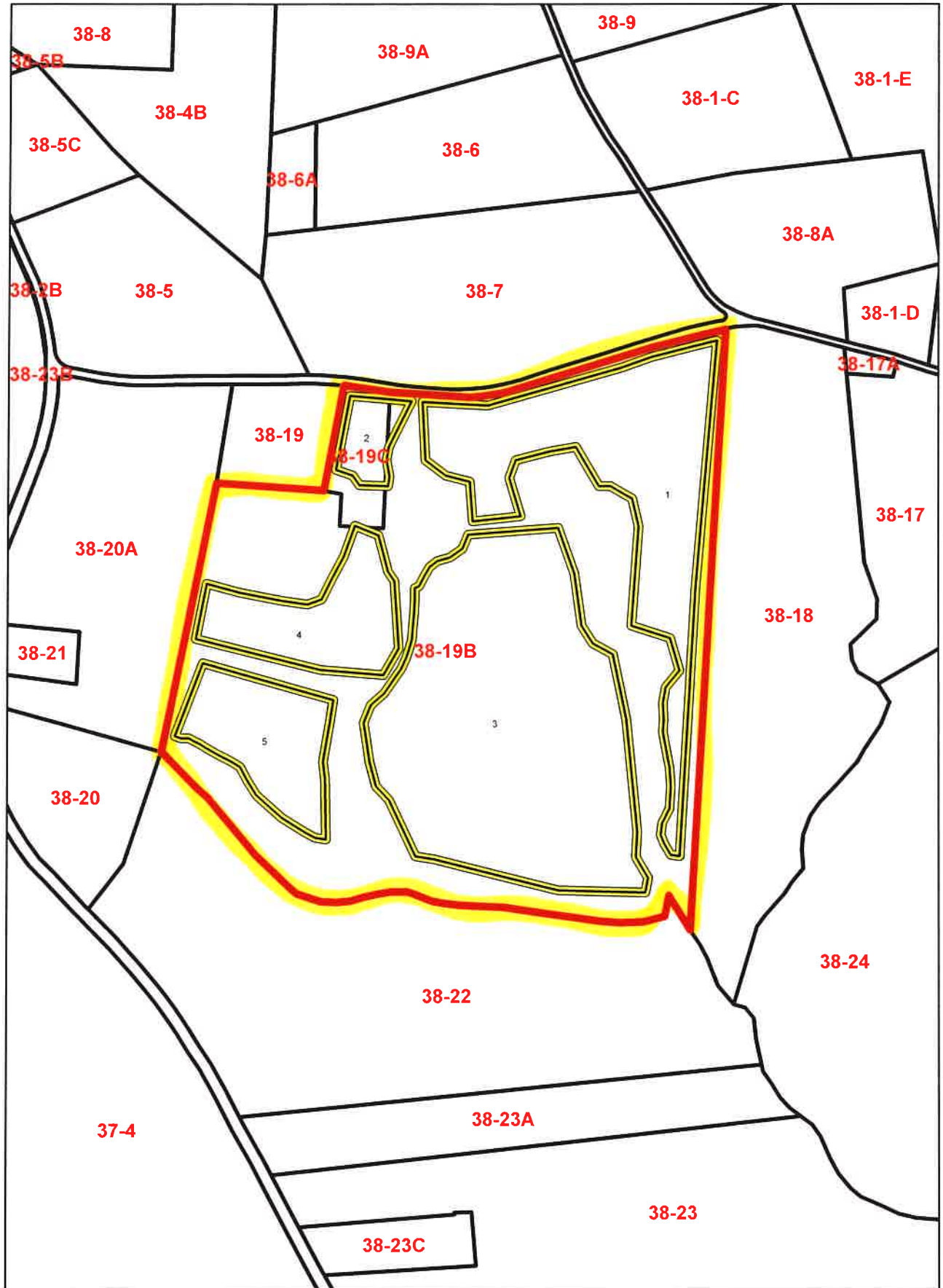


7-23-20

**Vicinity Map**

1 in = 1 miles





7-23-20

**Tax Map**

1 in = 660 feet

# ADJOINING LANDOWNERS

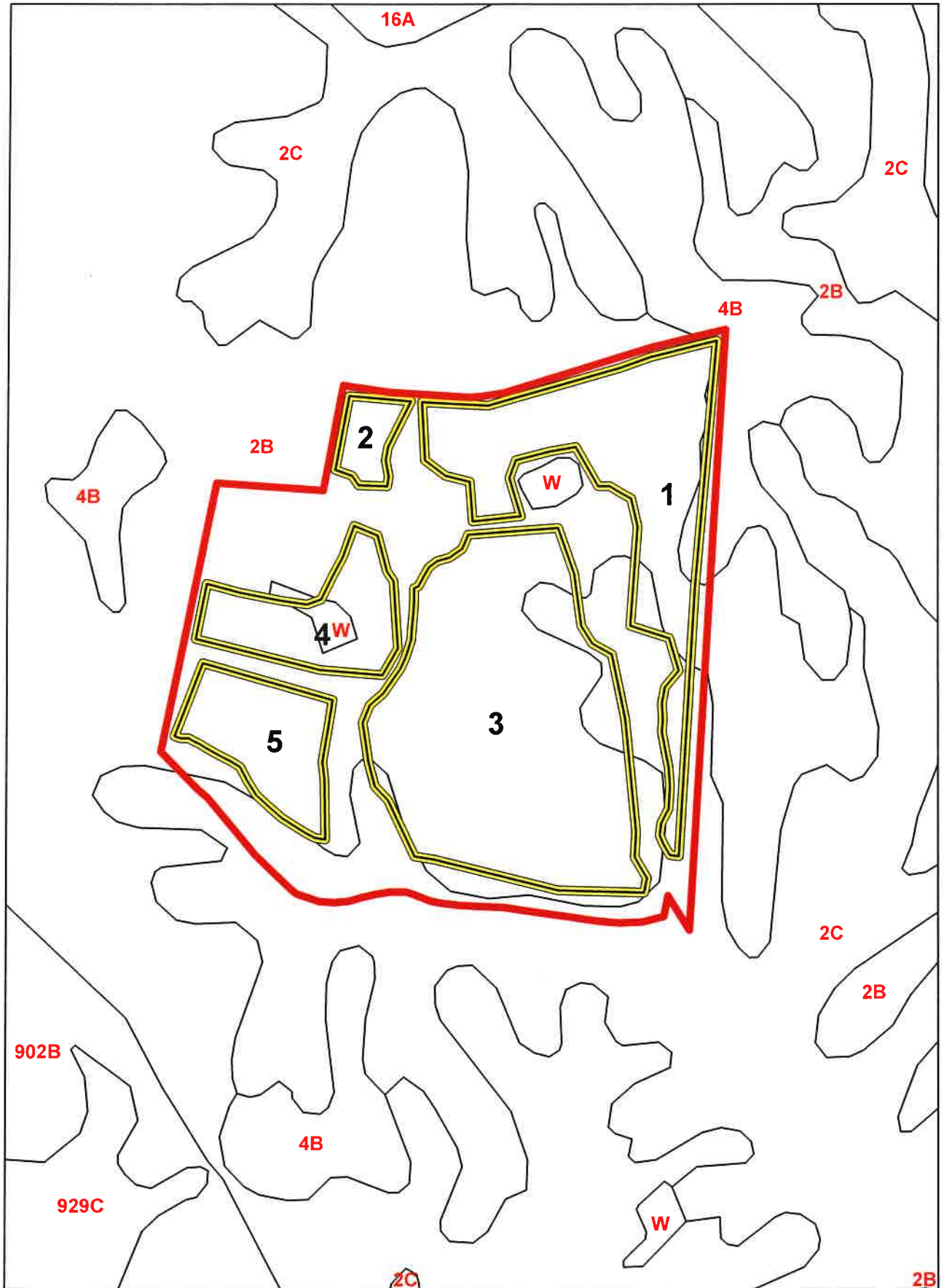
**Fred M. Moreau**

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**Dinwiddie County**

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<b>Tax Map</b>	<b>Parcel #</b>	<b>Owner Name(s)</b>
37	4	USA C/O Sup. Petersburg Natl Battlefield
38	7	Robert Curtis Blair Jr & Betty Kay McLoughlin Blair
	18	Robert Curtis Blair Jr & Betty Kay McLoughlin Blair
	19	Harrison or Deborah Moody
	20	Lois Paul & Eva M Moreau
	20A	Mary Lee Wallace
	22	Alan Wilson Smith



7-23-20  
Frequently  
Flood

## Soil Map

1 in = 660 feet



7-23-20

Tract 585

Farm 4060



2019 Program Year

Map Created June 20, 2019

Common Land Unit

- Non-Cropland
- Cropland
- rcf\_va053
- Tract Boundary
















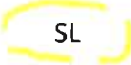


Wetland Determination Identifiers

- Restricted Use
- Limited
- Exempt from Conservation Compliance Provisions

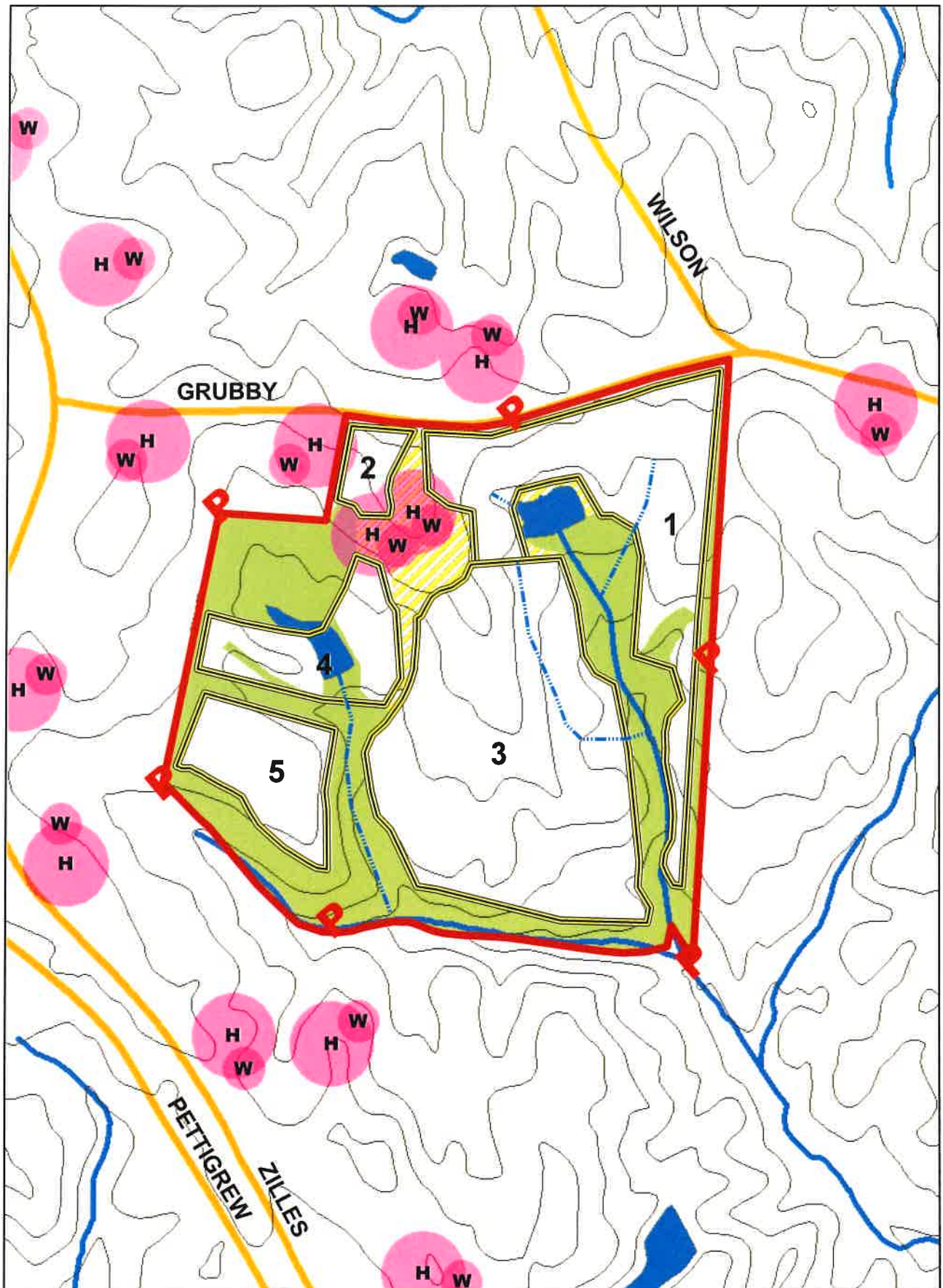
Tract Cropland Total: 86.33 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

# Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
  	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

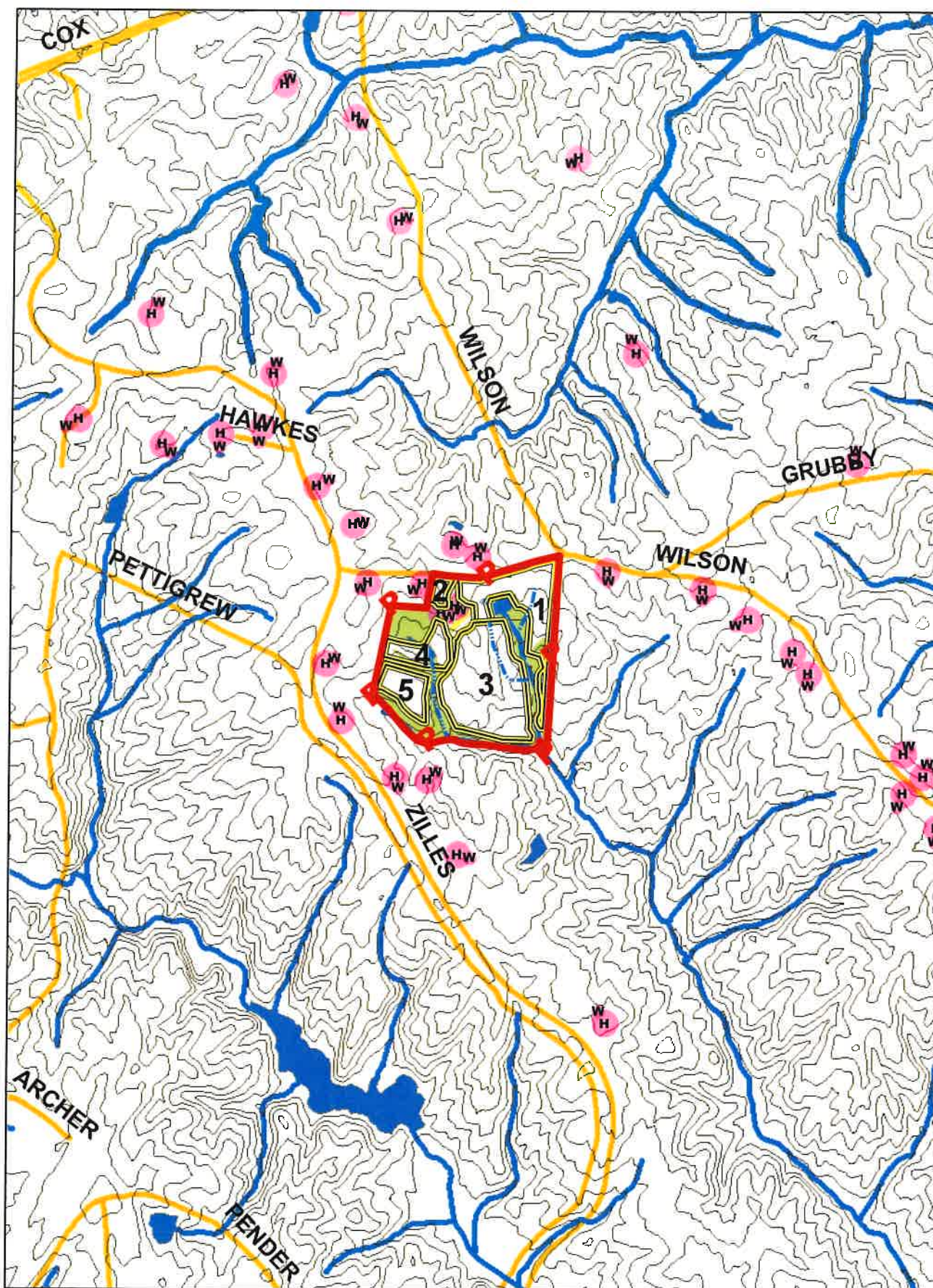
\*Buffer can be reduced or waived upon written consent from landowner.



7-23-20  
5-4-21

Site Map

1 in = 660 feet



7-23-20  
5-7-21

Topographic Map

1 in = 2,000 feet